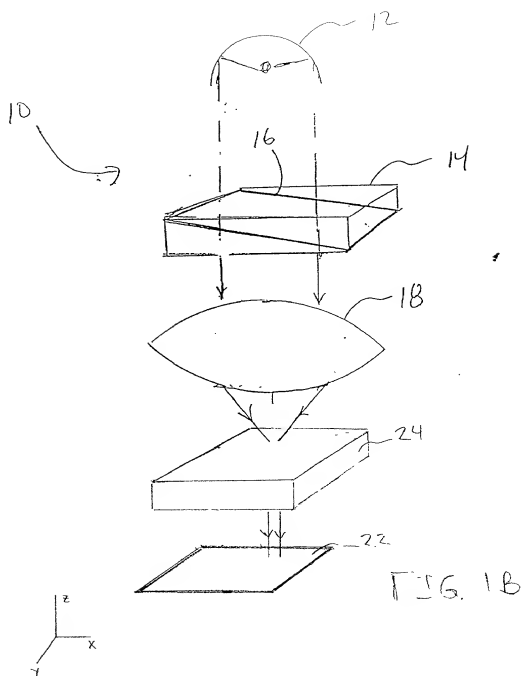
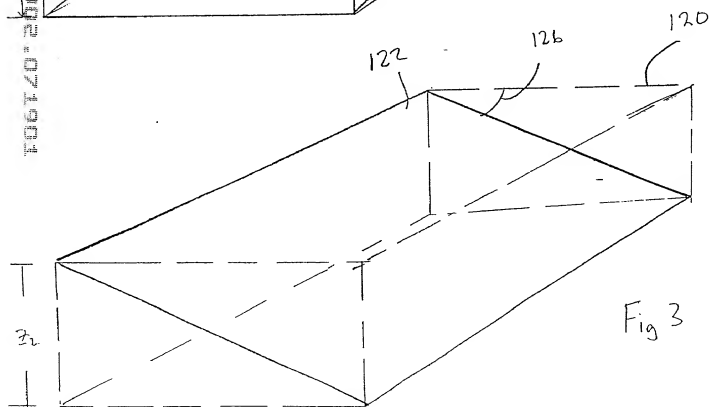
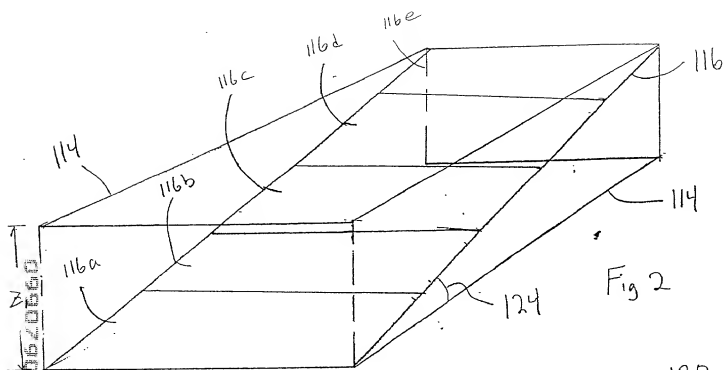
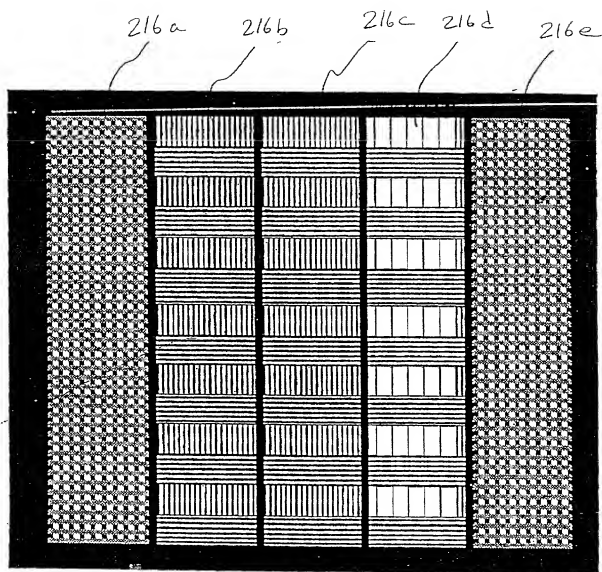


Fig 1A







216 ↗

Fig 4

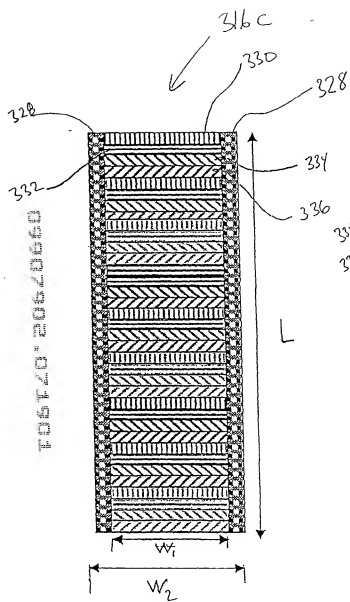


Fig. 5A

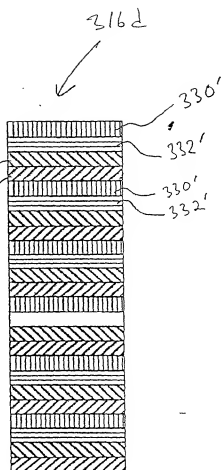


Fig. 5B

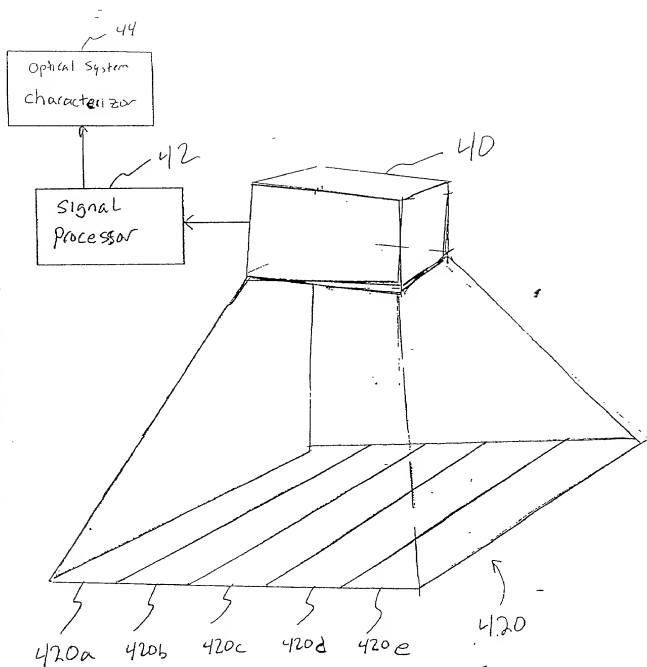


Fig 6

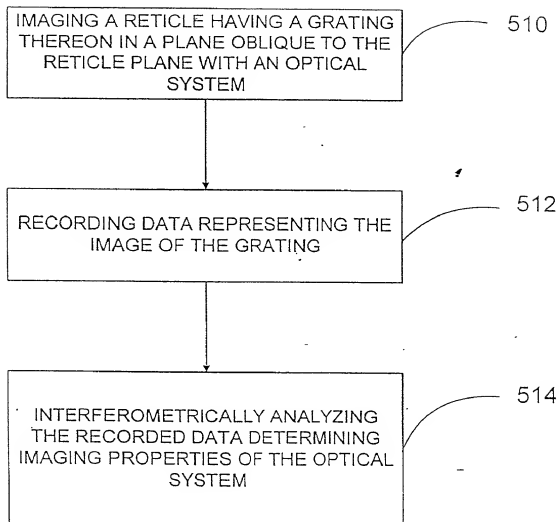


FIG. 7

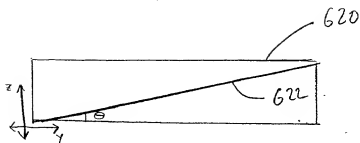


Fig 8A

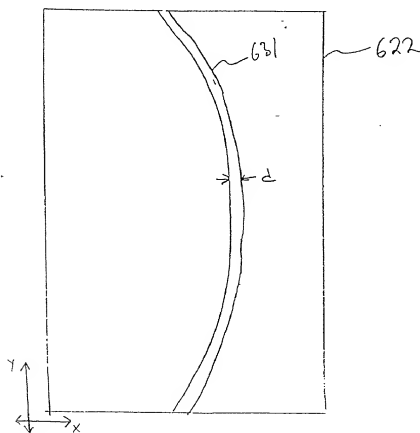
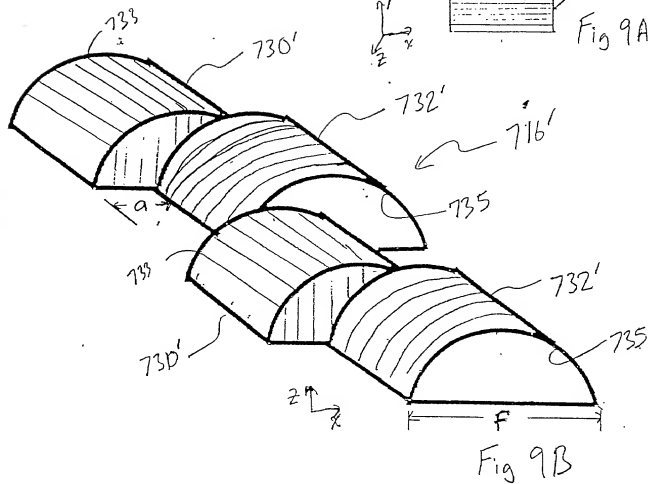
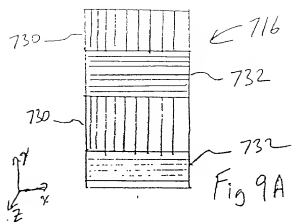
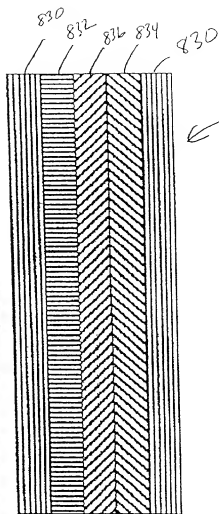


Fig 8B

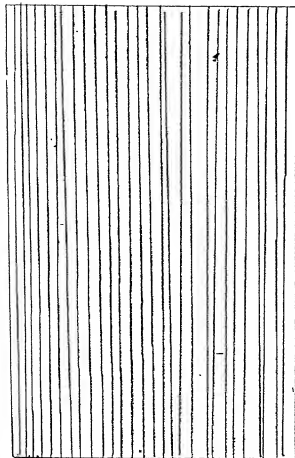


1061720.20670660



816

Fig 10A



817

81b

Fig 10B

106120-20620660

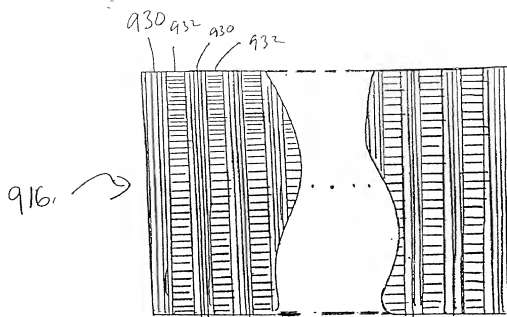


FIG 11A

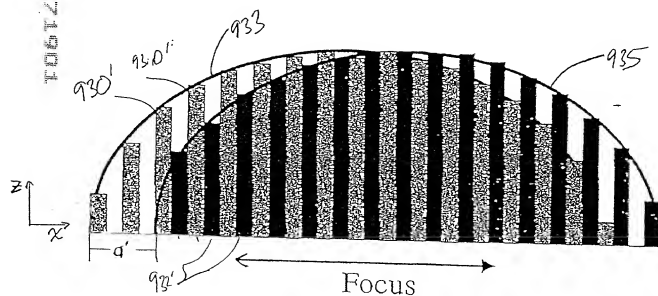
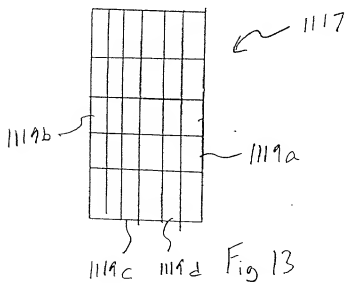
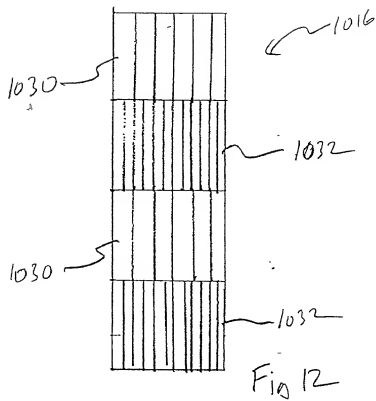
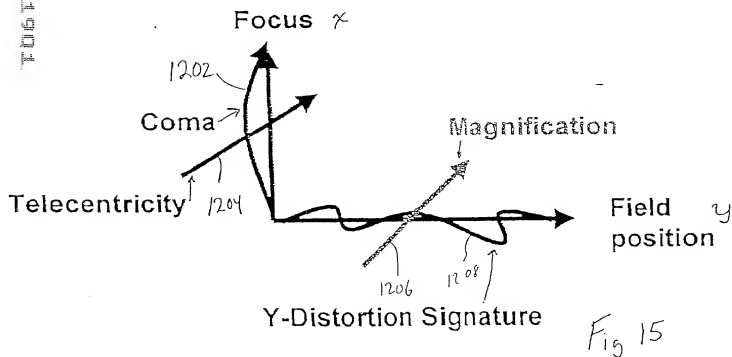
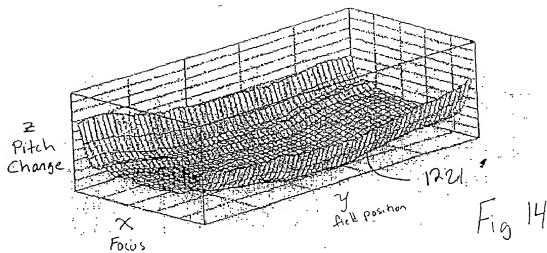


FIG 11B





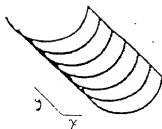
106140-206206603

Fig 16A



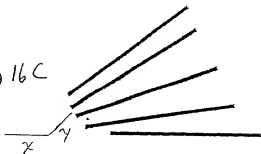
Magnification

Fig 16B



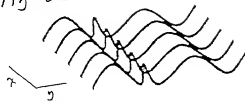
Coma

Fig 16C



Telecentricity

Fig 16D



Y-Distortion Signature

Fig 17

106120-20620660

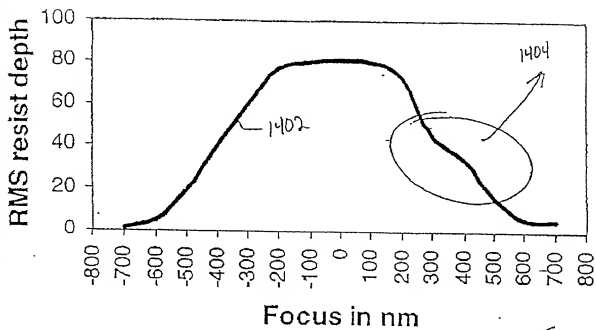
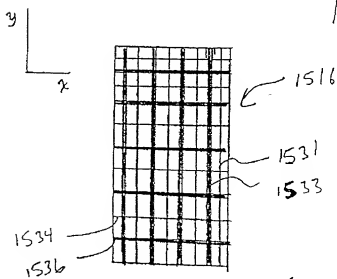
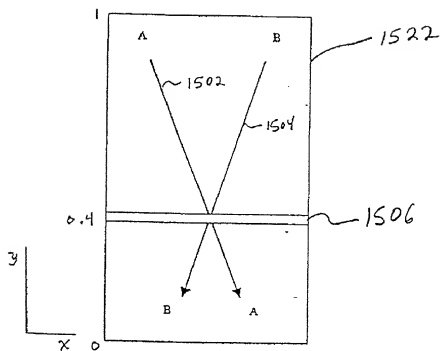
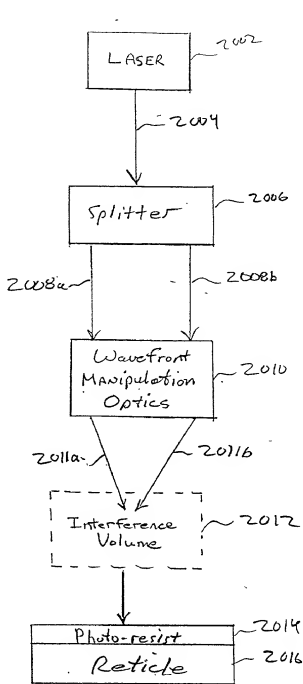


Fig. 18





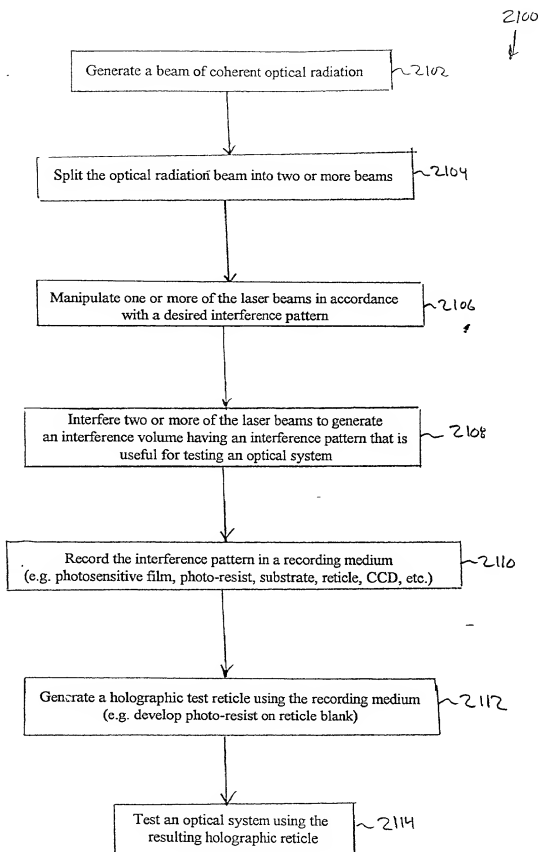


FIG. 21

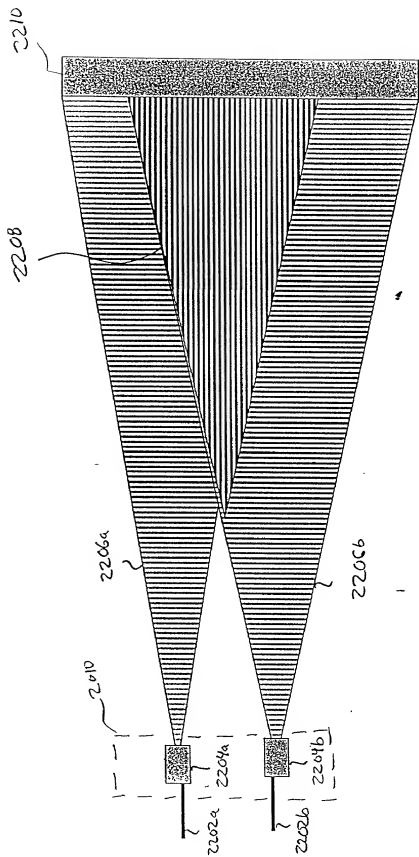
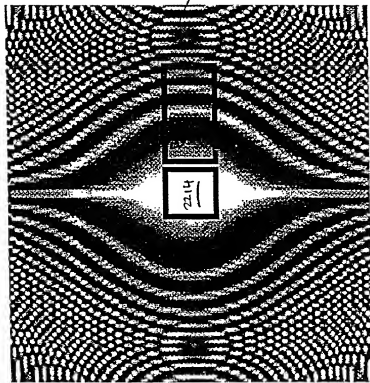


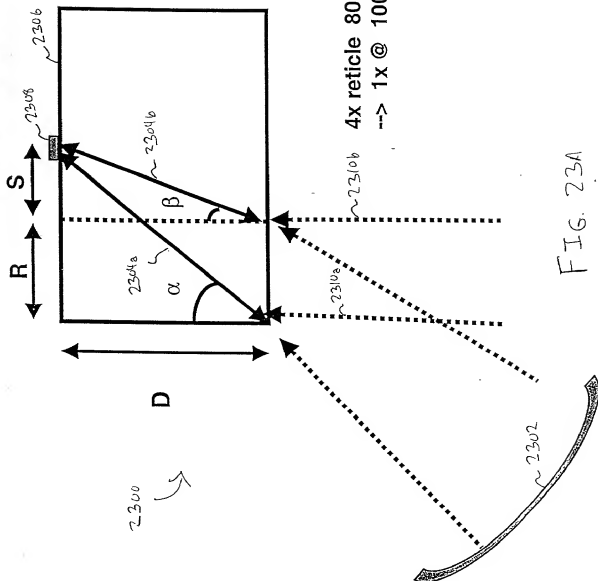
FIG. 22A

2122



2216

FIG. 22B



$$\lambda = 257$$

$$D = 400$$

$$S = 50$$

$$R = 100$$

$$\alpha = 18.7$$

$$\beta = 6.14$$

4x reticle 800 --> 2400 nm pitch range
 --> 1x @ 100 --> 300 nm pitch range

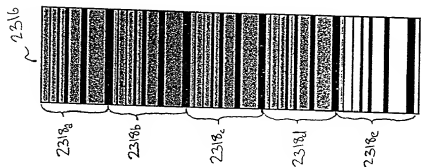
FIG. 23A



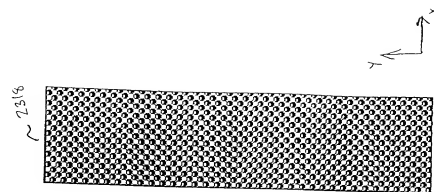
Cylinder Zone Plate
FIG. 23B



Reverse Cylinder Zone Plate
FIG. 23C



Interlaced Chirped
Holographic Structures
FIG. 23D



Circular Zone Plate Array
FIG. 23E

2316

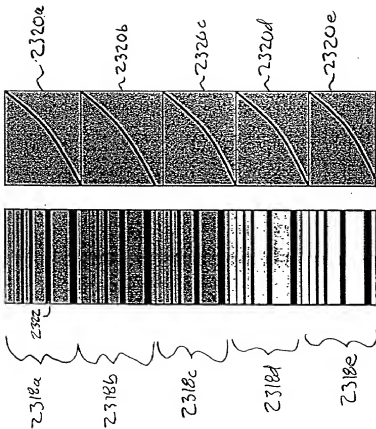
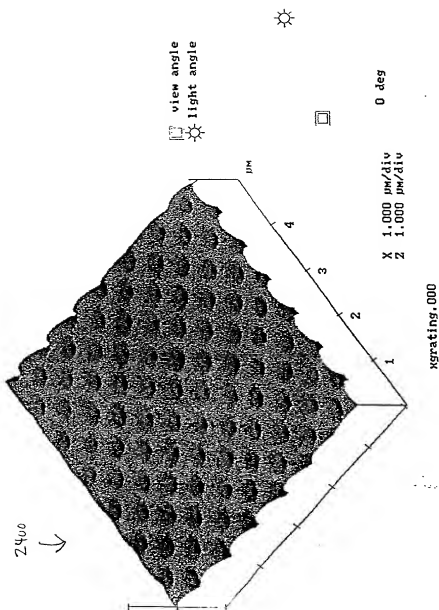


FIG. 23F



09607982-071904

2500
↖

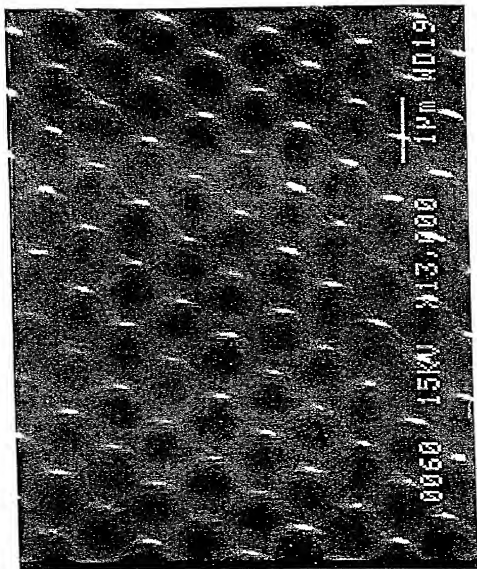


FIG 25

00907902 071904
106170 20670660

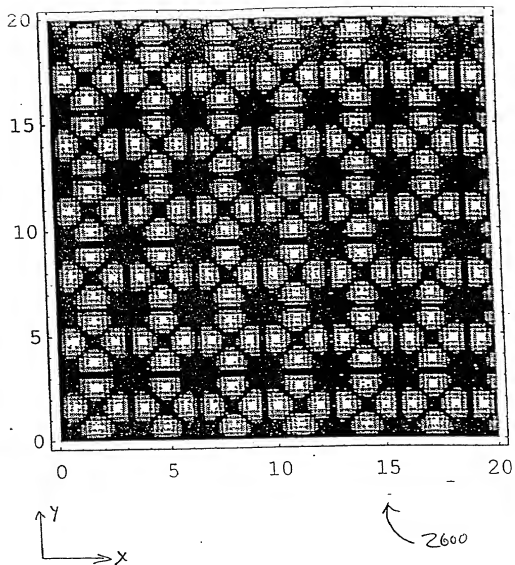


FIG. 26

09907992.071901

ML2

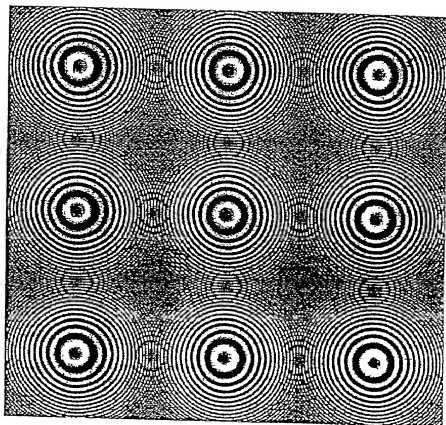


FIG. 27

Pitch change

Phase change

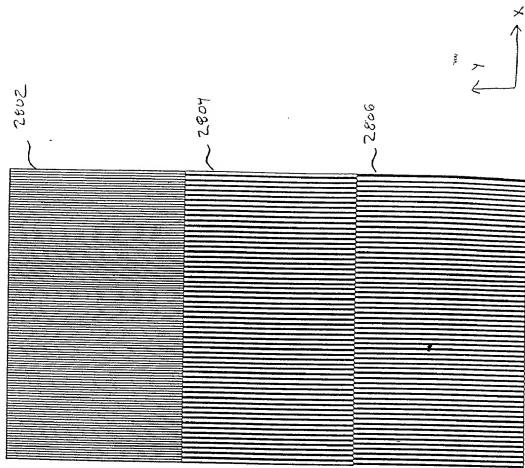


FIG. 28

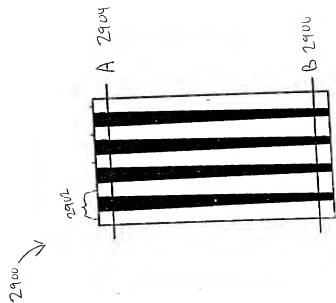


FIG 29A

2908 ↗

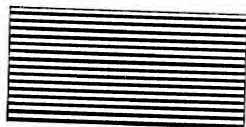
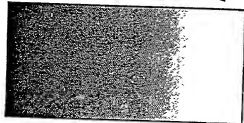


FIG 29A

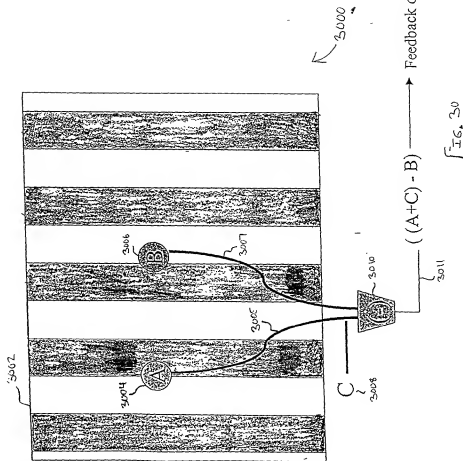
2910 ↗



↖ 2914

↖ 2912

FIG 29C



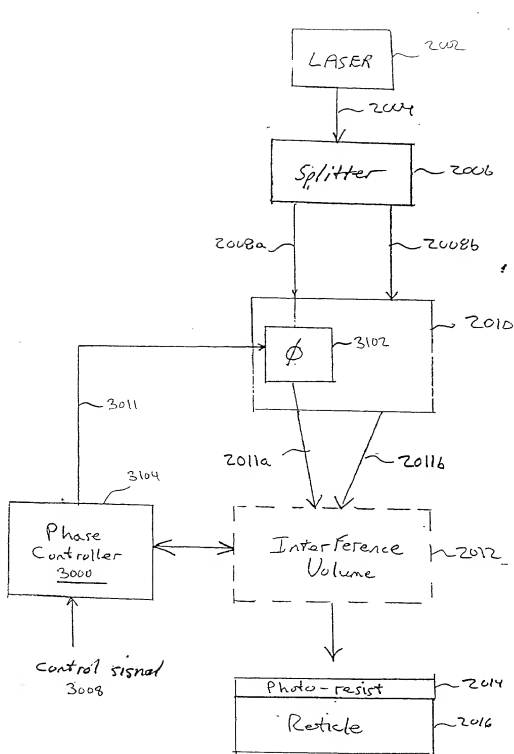


FIG. 31

3200

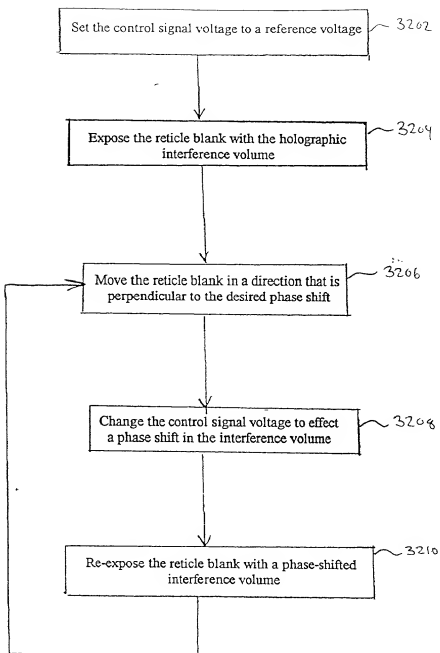
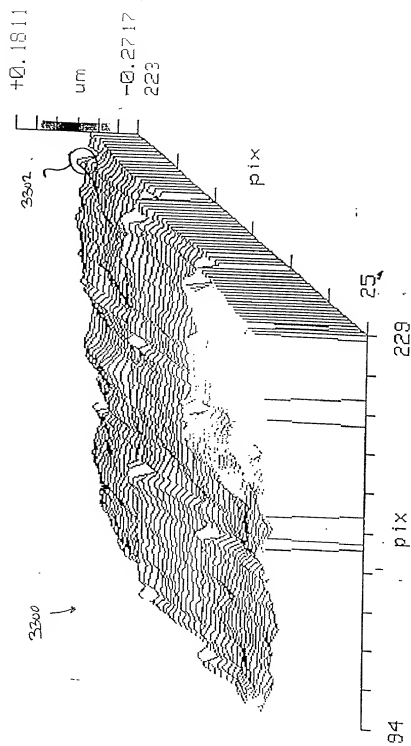


FIG 32

0937902 071904

106120 20620660



16.33

106170-20620660

3460

1:

↓

Coma-induced Distortion

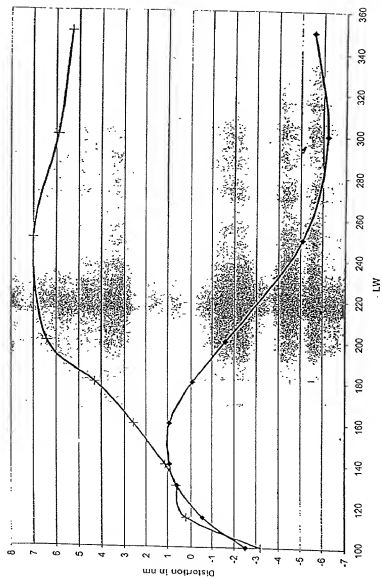


Fig. 34

09907002-071904

Image shift PC= 0.6 for 0.05 waves Z7 @248

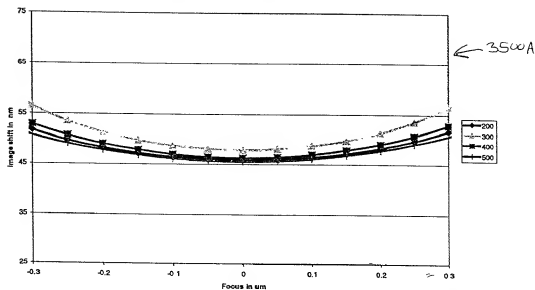


FIG 350A

Image shift PC= 0.3 for 0.05 waves Z7 @248

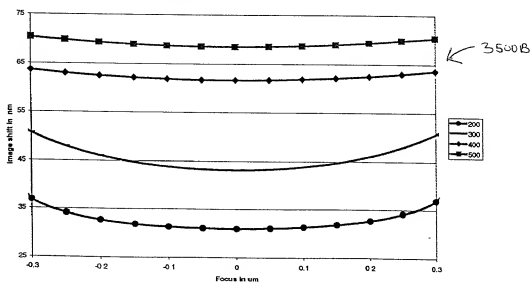


FIG. 350B

FIG. 36

3600	Diffraction Order			
	1st	2nd	3rd	4th
100 nm	a			
200 nm	b	a		
300 nm	c		a	
400 nm	d	b		a
600 nm	e	c		
800 nm		d	b	
900 nm			c	
1000 nm				b
1200 nm		e	d	c

09907902-071901